

Process Stream Characteristics	
Brief Description of Process	
Flow Data	<p>Gas stream temperature: 68 degrees F</p> <p>Moisture content: grams of water/cubic feet (ft³) of dry air</p> <p><u>Pressure drop range</u></p> <p>High: in. H₂O Low: in. H₂O</p> <p>Dew point temperature of process stream: degrees F</p> <p>Inlet flow rate: ACFM</p>
Dust Collection Device	<p><input type="checkbox"/> Pneumatic conveyor <input type="checkbox"/> Rotary airlock valves <input type="checkbox"/> Screw conveyors <input checked="" type="checkbox"/> Closed container</p> <p><input type="checkbox"/> Double dump <input type="checkbox"/> Drag conveyor</p> <p><input type="checkbox"/> Manual discharge device: <input type="checkbox"/> Slide gate OR <input type="checkbox"/> Hinged doors or drawers</p>
Operating Schedule	<p>Normal: 1.6 hours/day 5 days/week 52 weeks/year</p> <p>Maximum: hours/day days/week weeks/year</p>



DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline: 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 0
04/02/07

Please see instructions on page 3 before filling out the form.

IDENTIFICATION					
Company Name: QB Corporation		Facility Name:	Facility ID No.: 059-00008		
Brief Project Description: Permit Modification for Cyclones Cyclone #5					
CYCLONE SEPARATOR INFORMATION					
Equipment Description					
Manufacturer:	HJ Burns Company, Inc.		Model Number:		
Dimensions	<p>Give dimensions of cyclone. (See sample diagram above.)</p> <p>1. B: 11 in. 5. Z: 78 in. 2. H: 29 in. 6. D: 72 in. 3. S: in. 7. A: 40 in. 4. L: 42 in. 8. J: 12 in.</p>		Particulate Size Distribution Data		
			Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
			0.5-1.0		
			1.0-5.0		
			5-10		
			10-20		
	Over 20				
	Type of Cyclone		<input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry		
Type of Cyclone Unit		<input checked="" type="checkbox"/> Single <input type="checkbox"/> Quadruple <input type="checkbox"/> Dual <input type="checkbox"/> Multiclone			
Blower		Blower horsepower: 20 hp Design flow rate: 5,741 scfm Draft: <input checked="" type="checkbox"/> Forced <input type="checkbox"/> Induced			
Design Criteria	Cyclone configuration: <input checked="" type="checkbox"/> Positive pressure <input type="checkbox"/> Negative pressure				
Pre-Treatment Device	<input type="checkbox"/> Cyclone <input type="checkbox"/> Knock-out chamber <input type="checkbox"/> Precooler <input checked="" type="checkbox"/> None <input type="checkbox"/> Preheater		Post-Treatment Device		
	<input type="checkbox"/> Baghouse/Cartridge <input type="checkbox"/> HEPA <input type="checkbox"/> Other:				

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IDENTIFICATION																					
Company Name:	QB Corporation	Facility Name:																			
		Facility ID No.:	059-00008																		
Brief Project Description: Permit Modification for Cyclones Cyclone #6																					
CYCLONE SEPARATOR INFORMATION																					
Equipment Description																					
Manufacturer:	HJ Burns Company, Inc.		Model Number:																		
Dimensions	<p>Give dimensions of cyclone. (See sample diagram above.)</p> <p>1. B: 10 in. 5. Z: 96 in. 2. H: 22 in. 6. D: 72 in. 3. S: in. 7. A: 32 in. 4. L: 36 in. 8. J: 10 in.</p>		Particulate Size Distribution Data <table border="1"> <thead> <tr> <th>Micron range</th> <th>Particle size distribution weight %</th> <th>Manufacturer's guaranteed removal efficiency for each micron range</th> </tr> </thead> <tbody> <tr> <td>0.5-1.0</td> <td></td> <td></td> </tr> <tr> <td>1.0-5.0</td> <td></td> <td></td> </tr> <tr> <td>5-10</td> <td></td> <td></td> </tr> <tr> <td>10-20</td> <td></td> <td></td> </tr> <tr> <td>Over 20</td> <td></td> <td></td> </tr> </tbody> </table> <p>Type of Cyclone <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry</p> <p>Type of Cyclone Unit <input checked="" type="checkbox"/> Single <input type="checkbox"/> Quadruple <input type="checkbox"/> Dual <input type="checkbox"/> Multiclone</p> <p>Blower Blower horsepower: 20 hp Design flow rate: 5,741 scfm Draft: <input checked="" type="checkbox"/> Forced <input type="checkbox"/> Induced</p>	Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range	0.5-1.0			1.0-5.0			5-10			10-20			Over 20		
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Dust Collection Device	<p><input type="checkbox"/> Pneumatic conveyor <input type="checkbox"/> Rotary airlock valves <input type="checkbox"/> Screw conveyors <input checked="" type="checkbox"/> Closed container</p> <p><input type="checkbox"/> Double dump <input type="checkbox"/> Drag conveyor</p> <p><input type="checkbox"/> Manual discharge device: <input type="checkbox"/> Slide gate OR <input type="checkbox"/> Hinged doors or drawers</p>
Operating Schedule	<p>Normal: 16 hours/day 5 days/week 52 weeks/year</p> <p>Maximum: hours/day days/week weeks/year</p>

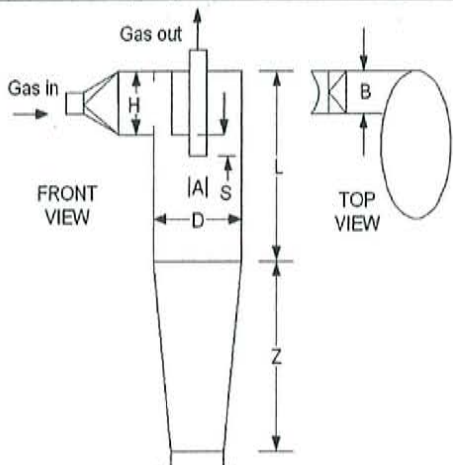


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IDENTIFICATION																				
Company Name: QB Corporation	Facility Name:	Facility ID No.: 059-00008																		
Brief Project Description: Permit Modification for Cyclones Cyclone #6																				
CYCLONE SEPARATOR INFORMATION																				
Equipment Description																				
Manufacturer: HJ Burns Company, Inc.	Model Number:																			
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Type of Cyclone <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry																				
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Dust Collection Device	<p><input type="checkbox"/> Pneumatic conveyor <input type="checkbox"/> Rotary airlock valves <input type="checkbox"/> Screw conveyors <input checked="" type="checkbox"/> Closed container</p> <p><input type="checkbox"/> Double dump <input type="checkbox"/> Drag conveyor</p> <p><input type="checkbox"/> Manual discharge device: <input type="checkbox"/> Slide gate OR <input type="checkbox"/> Hinged doors or drawers</p>
Operating Schedule	<p>Normal: 16 hours/day 5 days/week 52 weeks/year</p> <p>Maximum: hours/day days/week weeks/year</p>



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IDENTIFICATION			
Company Name: QB Corporation	Facility Name:	Facility ID No.: 059-00008	
Brief Project Description: Permit Modification for Cyclones Cyclone #8			
CYCLONE SEPARATOR INFORMATION			
Equipment Description			
Manufacturer: HJ Burns Company, Inc.	Model Number:		
Dimensions Give dimensions of cyclone. (See sample diagram above.) 1. B: 5 in. 5. Z: 72 in. 2. H: 17 in. 6. D: 36 in. 3. S: in. 7. A: 16 in. 4. L: 25 in. 8. J: 8 in.	Particulate Size Distribution Data		
	Micron range	Particle size distribution weight %	Manufacturer's guaranteed removal efficiency for each micron range
	0.5-1.0		
	1.0-5.0		
	5-10		
	10-20		
	Over 20		
Type of Cyclone <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry			
Type of Cyclone Unit <input checked="" type="checkbox"/> Single <input type="checkbox"/> Quadruple <input type="checkbox"/> Dual <input type="checkbox"/> Multiclone			
Blower Blower horsepower: 30 hp Design flow rate: 2,223 scfm Draft: <input checked="" type="checkbox"/> Forced <input type="checkbox"/> Induced			
Design Criteria	Cyclone configuration: <input checked="" type="checkbox"/> Positive pressure <input type="checkbox"/> Negative pressure		
Pre-Treatment Device	<input type="checkbox"/> Cyclone <input type="checkbox"/> Knock-out chamber <input type="checkbox"/> Precooler <input checked="" type="checkbox"/> None <input type="checkbox"/> Preheater		
Post-Treatment Device	<input type="checkbox"/> Baghouse/Cartridge <input type="checkbox"/> HEPA <input type="checkbox"/> Other:		

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Dust Collection Device	<p><input type="checkbox"/> Pneumatic conveyor <input type="checkbox"/> Rotary airlock valves <input type="checkbox"/> Screw conveyors <input checked="" type="checkbox"/> Closed container</p> <p><input type="checkbox"/> Double dump <input type="checkbox"/> Drag conveyor</p> <p><input type="checkbox"/> Manual discharge device: <input type="checkbox"/> Slide gate OR <input type="checkbox"/> Hinged doors or drawers</p>			
Operating Schedule	Normal:	hours/day	days/week	20 hours/yr weeks/year
	Maximum:	hours/day	days/week	weeks/year

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton Boise, ID 83706 For assistance: (208) 373-0502	PERMIT TO CONSTRUCT APPLICATION						
Company Name:	QB Corporation							
Facility Name:								
Facility ID No.:	059-00008							
Brief Project Description:	Modify Permit To Include Cyclones							
SUMMARY OF AIR IMPACT ANALYSIS RESULTS - CRITERIA POLLUTANTS								
Criteria Pollutants	Averaging Period	1.	Significant Contribution Level (µg/m3)	2.	3.	4.	NAAQS (µg/m3)	5.
		Significant Impact Analysis Results (µg/m3)		Full Impact Analysis Results (µg/m3)	Background Concentration (µg/m3)	Total Ambient Impact (µg/m3)		Percent of NAAQS
PM ₁₀	24-hour	39.37111	5	32.8053	73.00	105.81	150	70.5%
	Annual	9.33998	1	9.3400	26.00	35.34	50	70.7%
SO ₂	3-hr	10.49146643	25				1300	
	24-hr	4.490124225	5				365	
	Annual	0.73688685	1				80	
NO ₂	Annual	6.48460428	1	6.4846	4.30	10.78	100	10.8%
CO	1-hr	367.8500484	2000				10000	
	8-hr	164.276955	500				40000	

